



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,807	02/09/2004	Michael J. Duffy	TPL 0134 PUS	9247
22045	7590	09/08/2006	EXAMINER	
BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			KYLE, MICHAEL J	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/774,807

Applicant(s)

DUFFY, MICHAEL J.

Examiner

Michael J. Kyle

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the strand having a first end at a first coil end and a second end with a longitudinally extended portion extending from a first coil end along a longitudinal direction of the coil, to a position at the first coil end (from claim 1) in combination with the pivot link being a gooseneck arm (from claim 4) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Examiner notes that even when the term “end” is interpreted to refer to a portion rather than a point, none of the figures 1-5 appear to show the second end extend from a first coil end to a second coil end. The embodiments depicted in figures 6 and 7 appear to show this feature, but fail to show a gooseneck arm.

2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet”

Art Unit: 3677

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The claim terminology of claims 1 and 10 referring to first and second coil ends and first and second strand ends are not provided for in the specification. Additionally, because this language is not found in the specification, these elements are not labeled in the drawings.

### ***Claim Objections***

4. Claim 4 is objected to because it is unclear if the “first strand end” and “second strand end” are the same as the “first end” and “second end” recited in the claim 1. As best understood they are.

5. Claim 10 is objected to because of the limitation “first coil and” (line 8). Examiner believes this should read -- first coil end --.

6. Claim 10 is objected to for the limitation “and a second, strand end”. Examiner believes the comma (,) between second and strand should be removed.

### ***Claim Rejections - 35 USC § 112***

Art Unit: 3677

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 1 provides for a spring comprising “a laterally coiled strand”. From this, only a coiled strand is claimed. It is unclear if there is any portion of the strand that is not coiled. It appears as though the strand includes a coiled portion and an uncoiled portion, however, the claim does not provide for any uncoiled portion.

10. Claim 1 recites that a longitudinally extended portion extends along a longitudinal direction of “said coil” (line 8). The limitation “said coil” lacks antecedent basis as no coil has been claimed. The “laterally coiled strand” of line 5 describes the strand as being coiled but does not positively recite a coil.

11. Claim 1 recites that the second end has a “longitudinally extended portion” (line 7). It is unclear if the term “end” is to refer only to an end point, or a portion having a longitudinal dimension. As best understood, the “second end” actually refers to a portion, not an end point.

12. Claim 1 recites that the second end has a longitudinally extending portion extending “to a position at said first coil end”. Claim requires the second end to include a radially extending arm portion. It is unclear how the radially extending arm portion can function if the second end only extends “to” a position at the first coil end. It appears as though it must extend beyond the first coil end.

Art Unit: 3677

13. Claims 2-9 depend from rejected claim 1, and include all the limitations thereof. For this reason, these claims are also rejected.

14. Claim 10 provides for “a laterally coiled strand spring”. From this, only a coiled portion of the strand is claimed. It is unclear if there is any portion of the strand that is not coiled. It appears as though the strand includes a coiled portion and an uncoiled portion, however, the claim does not provide for any uncoiled portion.

15. Claim 10 recites that a second strand end portion extends along a longitudinal direction of “said coil” (line 10). The limitation “said coil” lacks antecedent basis as no coil has been claimed. The “laterally coiled strand” of line 7 describes the strand as being coiled but does not positively recite a coil.

16. Claim 11 depends from claim 10, and includes all of the limitations thereof. For this reason, claim 11 is also rejected.

***Claim Rejections - 35 USC § 102***

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 1, and 4-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Germann (U.S. Patent No. 3,024,488). With respect to claims 1, 4, 5, Germann discloses a closure hinge comprising a mount (11), a pivot link (20), a pivot (25), and a spring (30) having a laterally coiled strand extending from a first coil end (right side of coil in figure 4) to a second coil end

Art Unit: 3677

(left side of coil in figure 4), and having a first end (on 32) at the first coil end (31) and a second end (at 33) with a longitudinally extended portion along a longitudinal direction of the coil to a position at the first coil end, wherein the first and second ends bias the link and the mount at the first coil end. The first strand end (on 32) and the second strand end (at 33) terminate at a substantially coplanar position (substantially at the vertical plane defined by 11, see figure 4).

The pivot link (20) is a gooseneck arm. Examiner notes that the claimed term “end” is considered to refer to a portion rather than a specific point. This interpretation is consistent with applicant’s claim language where it is recited that the second end has a “longitudinally extended portion”.

19. With respect to claims 6 and 7, Germann discloses the first and second ends to include radially extending arm portions (31, 32). One of the arm portions (32) has a terminal portion pivotally secured to the mount (at 34).

20. With respect to claims 8 and 9, Germann discloses both the first and second ends to include radially extending arm portions (31, 32) having terminal portions. The first terminal portion is pivotally secured about a first spring arm axis (at 33) to the pivot link (20), and the second terminal portion is pivotally secured about a second spring arm axis (at 34) to the mount. The spring arm axis and the second spring arm axis are spaced from and parallel to the pivot axis flange (at 25).

21. With respect to claim 10, Germann discloses a method biasing a vehicle closure hinge comprising the steps of mounting a pivot axis flange (on 11) on a bordering structure, aligning a pivot link (20) adjacent the pivot axis flange, coupling the pivot link to the pivot axis flange (via 25), and biasing the pivot link about the pivot axis flange with a laterally coiled strand spring

Art Unit: 3677

(30). The strand has first and second ends (at 33 and 34, respectively). The first strand end extends along a longitudinal direction of the coil to a position at the first coil end. The biasing acts about the pivot axis.

***Claim Rejections - 35 USC § 103***

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claims 2, 3, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Germann in view of Herzfeld. Germann does not show the longitudinally extended portion of the spring (at 33) to be positioned coaxially or aligned within the coil.

24. Herzfeld teaches a spring (26) that includes a laterally coiled strand portion (28) having first and second coil ends, with a first strand end (30) at the first coil end and a second strand end (32, 33) that includes a longitudinally extending portion (32) extending from the second coil end to the first coil end. The longitudinally extended portion (32) is positioned and aligned within the coil (28) and extends coaxially with the coil (see figures 2 and 3). This arrangement allows for a hinge to have a single inconspicuous coil spring in a hinge pin opening that acts both as a hinge pin and to bias the hinge (column 1, lines 16-18). Additionally, this arrangement reduces cost and adds aesthetic appeal (column 1, lines 40-42).

***Response to Arguments***



Art Unit: 3677

25. Applicant's arguments filed May 15, 2006, have been fully considered but they are not persuasive. Applicant asserts that the amendment submitted May 15, 2006, and entered with the Request for Continued Examination of June 15, 2006, places the application in condition for allowance, and further asserts that such amendments were indicated by examiner to place the application in condition for allowance. Examiner respectfully disagrees that any agreement was reached regarding the allowability of any claims, and any discussions regarding language were directed only to the prior art cited in the rejection. Additionally, upon further readings of applicant's claims, the independent claims remain rejected under the same premise as set forth in the Final Office Action of January 13, 2006. Such premise, as set forth above, is supported by applicant's broad definition of "end" recited in the claims, where an "end" can be interpreted as being a portion (having a longitudinal extension, as recited in the claims), rather than narrowly limiting the term to a single point. It is noted that new grounds of rejection have been introduced for the rejections of claims 2, 3, and 11.

### *Conclusion*

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following reference is cited to further show the state of the art with respect to spring hinges: Dumas.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Kyle whose telephone number is 571-272-7057. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

Art Unit: 3677

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Michael J. Kyle", with a long horizontal flourish extending to the right.

mk

Michael J. Kyle